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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,642	02/27/2004	Yefim Sukhman	483018016US1	7240

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EXAMINER	
FLORES RUIZ, DELMA R	
ART UNIT	**PAPER NUMBER**
2828	

MAIL DATE	DELIVERY MODE
06/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/788,642	SUKHMAN ET AL.	
	Examiner	Art Unit	
	Delma R. Flores Ruiz	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on June 4, 2007.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3, 5 – 10, 12 – 18 and 20 – 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin (4,805,177).

Regarding claim 1, Martin in Figures 1 – 3, a power source (see Fig. 1, Character 34) for causing the laser source (see Fig. 1, Character 18) to generate a laser beam; and a fan (see Fig. 1, Character 32) for generating an air flow; wherein the laser source (see Fig. 1, Character 18) and the power source (see Fig. 1, Character 34) each have an exterior surface; and wherein the laser source (see Fig. 1, Character 18) and the power source (see Fig. 1, Character 34) are arranged in an end-to-end series relation along a longitudinal axis such that the fan (see Fig. 1, Character 32) directs the air flow generally in the direction of the longitudinal axis to pass first substantially adjacent to the exterior surface of the laser source (see Fig. 1, Character 18) for the

cooling thereof, and then to pass substantially adjacent to the exterior surface of the power source (see Fig. 1, Character 34) for subsequent cooling thereof (Figure 1, Column 4, Lines 8 – 18, 49 – 55 and Column 5, Lines 57 – 67).

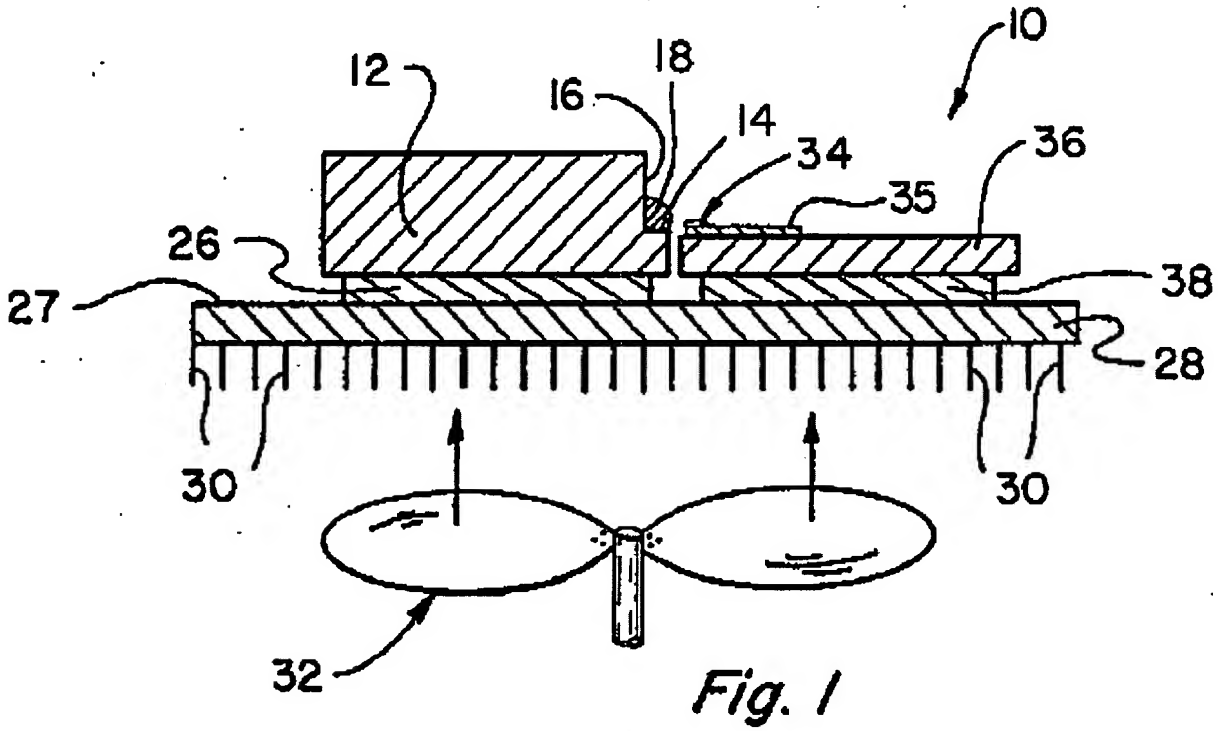

Fig. 1

Regarding claim 2 and 18, Martin in Figures 1 – 3, the exterior surfaces of said laser source (see Fig. 1 Character 18) and said power source (Column 1, Lines 34) includes: a substantially developed surface to facilitate transfer of heat to air; wherein the fan (see Fig. 1 Character 32) directs the air flow substantially adjacent to the developed surface of each of said laser source (see Fig. 1, Character 18) and said power source (see Fig. 1, Character 34).

Regarding claims 3 and 19, Martin in Figures 1 – 3, a cooling fins (see Fig. 1 Character 30).

Regarding claim 4 and 20, Martin in Figures 1 – 3, discloses a cooling fins (see Fig. 1, Character 30) on said laser source (see Fig. 1, Character 18) are profiled in a direction along the longitudinal axis of the laser.

Regarding claims 5 and 21, Martin in Figures 1 – 3, laser source (see Fig. 1, Character 18) and said power source (see Fig. 1, Character 34) have generally equal cross-sectional areas in a direction perpendicular to the longitudinal axis (See Fig. 1).

Regarding claim 15, Martin in Figures 1 – 3, a laser, which comprises: a power (see Fig. 1, Character 34) for causing the laser source (see Fig. 1, Character 18) to generate a laser beam (see Fig. 4); and a cooling fan (see Fig. 4, Character 100) at one end of the power source (see Fig. 1, Character 34), the cooling fan (see Fig. 1, Character 32) being adapted for generating an air flow directed in a generally straight line path with said laser source and said power source for cooling said laser source and said power source Column 4, Lines 8 – 18, 49 – 55 and Column 5, Lines 57 – 67).

Regarding claims 16 and 17, Martin in Figures 1 – 3, cooling fan (see Fig. 1, Character 32) generates the air flow in a direction to cool said laser source (see Fig. 1,

Character 18) before cooling said power source (see Fig. 1, Character 34) or said cooling fan (see Fig. 1, Character 32) generates the air flow in a direction to cool said power source (see Fig. 1, Character 34) before cooling said laser source (see Fig. 1, Character 18 and Column 4, Lines 8 – 18, 49 – 55 and Column 5, Lines 57 – 67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 7 – 14, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (4,805,177) in view of Ostler (5,550,853)

Regarding claims 6, 14 and 22, Martin dislcoses the claimed invention except shroud covering. Ostler teaches providing his device with a shroud covering. However, it is well know in the art to apply the shroud covering as discloses by Ostler in see Fig. 1, Character 20. Therefore, it would have been obvious to a person having ordinary

skill in the art at the time the invention was to apply the well known shroud covering as suggested by Ostler to the laser of Martin, because could be use to protect the device from atmosphere, dust, environment, etc. see Figure 1, Character 20, of Ostler.

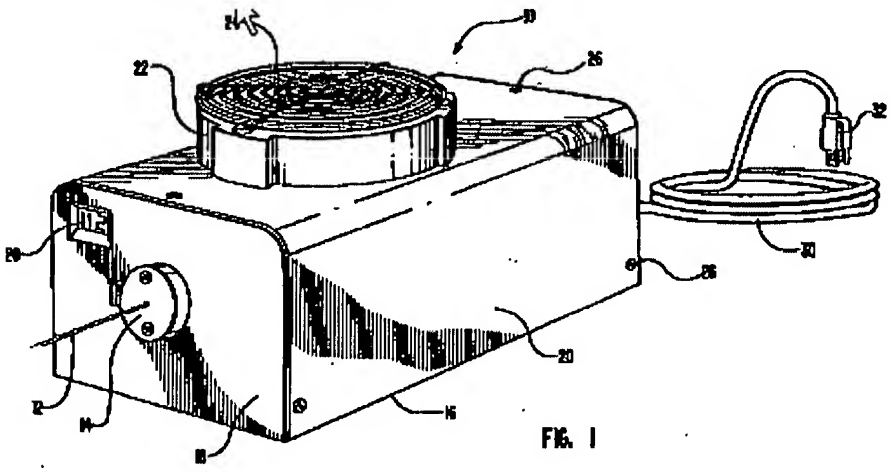

FIG. 1

Regarding claim 7, Martin shown on Figures 1 and 5, discloses a laser which comprises: a laser source (see Fig. 5, Character 112) having a first end, a second end spaced apart form a first end along a longitudinal axis, a laser resonator (see Fig. 5, Characters 124 and 126); a laser media (see Fig. 1, Character 18); a power source (see Fig. 5, Character 114) substantially adjacent to one the first or second ends of said laser source and adapted for causing the laser source (see Fig. 5, Character 112) to generate a laser beam, wherein the power source and the laser source (see Fig. 5, Character 112) are aligned along the longitudinal axis; and a cooling fan (see Fig. 1, Character 32) positioned substantially adjacent said power source (see Fig. 1, Character 34) and located in a generally straight line path with said laser source (see Fig. 1, Character 18)

and said power source (see Fig. 1, Character 34) along the longitudinal axis said cooling fan (see Fig. 1, Character 32) adapted for generating an air flow for cooling said laser source (see Fig. 1, Character 18) and said power source (see Fig. 1, Character 34).

Martin discloses the claimed invention except for electrode. Ostler teaches providing his device with an electrode. However, it is well know in the art to apply the electrode as discloses by Ostler in see Fig. 2 Character 46 and 48. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was to apply the well known electrode as suggested by Ostler to the laser of Martin, because could be use to stimulating the laser see (see Fig. 2, Characters 46, 48, the reference call "cathode and anode) of Ostler.

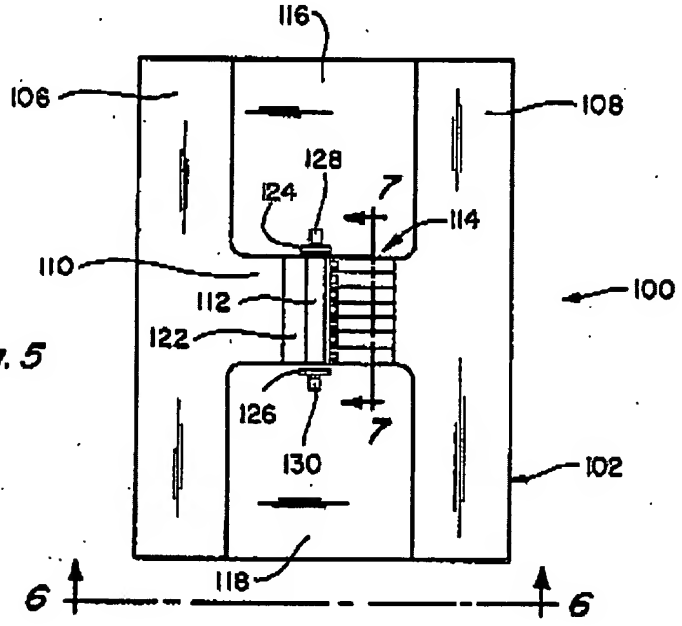

Fig. 5

Regarding claims 8 and 9, Martin in Figures 1 – 3, cooling fan (see Fig. 1, Character 32) generates the air flow in a direction to cool said laser source (see Fig. 1, Character 18) before cooling said power source (see Fig. 1, Character 34) or said cooling fan (see Fig. 1, Character 32) generates the air flow in a direction to cool said power source (see Fig. 1, Character 34) before cooling said laser source (see Fig. 1, Character 18 and Column 4, Lines 8 – 18, 49 – 55 and Column 5, Lines 57 – 67).

Regarding claim 10, Martin in Figures 1 – 3, the exterior surfaces of said laser source (see Fig. 1 Character 18) and said power source (Column 1, Lines 34) includes: a substantially developed surface to facilitate transfer of heat to air; wherein the fan (see Fig. 1 Character 32) directs the air flow substantially adjacent to the developed surface of each of said laser source (see Fig. 1, Character 18) and said power source (see Fig. 1, Character 34).

Regarding claims 11, Martin in Figures 1 – 3, a cooling fins (see Fig. 1 Character 30).

Regarding claim 12, Martin in Figures 1 – 3, discloses a cooling fins (see Fig. 1, Character 30) on said laser source (see Fig. 1, Character 18) are profiled in a direction along the longitudinal axis of the laser.

Regarding claims 13, Martin in Figures 1 – 3, laser source (see Fig. 1, Character 18) and said power source (see Fig. 1, Character 34) have generally equal cross-sectional areas in a direction perpendicular to the longitudinal axis (See Fig. 1).

Regarding claim 23, Martin in Figures 1 – 3, discloses a laser, comprising: a laser source (see Fig. 5, Character 112) having a first end, a second end spaced apart from a first end along a longitudinal axis, a laser resonator (see Fig. Character 124 and 126), a laser media (see Fig. 1, Character 18) a power source (see Fig. 5, Character 114) substantially adjacent to one of the first or second ends of the laser source (see Fig. 5, Character 112) and adapted for causing the laser source (see Fig. 5, Character 112) to generate a laser beam, wherein the power source (see Fig. 5, Character 114) and the laser source (see Fig. 5, Character 112) are aligned along the longitudinal axis; and a cooling fan (see Fig. 1, Character 32) positioned adjacent to the power source (see Fig. 1, Character 18) and in a generally straight line path with the laser source (see Fig. 1, Character 34) and the power source (see Fig. 1, Character 34) along the longitudinal axis, wherein the cooling fan (see Fig. 1, Character 32) is adapted for generating an air flow for cooling the laser source and the power source.

Martin discloses the claimed invention except for electrode. Ostler teaches providing his device with an electrode. However, it is well know in the art to apply the electrode as discloses by Ostler in see Fig. 2 Character 46 and 48. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the

invention was to apply the well known electrode as suggested by Ostler to the laser of Martin, because could be use to stimulating the laser see (see Fig. 2, Characters 46, 48, the reference call "cathode and anode") of Ostler.

Response to Arguments

Applicant's arguments filed June 4, 2007 have been fully considered but they are not persuasive. Applicant's arguments with respect to claims 1 – 23 have been considered but are moot in view of the new ground(s) of rejection. Applicants amendments raised new issues that made necessary the new art to be applied and therefore, the arguments presented against Ostler are said to be moot due to the new grounds of rejection. Applicant's amendments have been fully addressed by the above-presented rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Sun Harvey can be reached on (571) -272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Delma R. Flores Ruiz/
Examiner
Art Unit 2828

Min Sun Harvey
Supervisor Patent Examiner
Art Unit 2828

DRFR/MH
June 7, 2007